TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION

WIN-1428

Effective July 1, 2011

The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code** (IRC) and the **International Building Code** (IBC). This product shall be subject to reevaluation **July 2013**.

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Heritage Transoms, Individual, Impact Resistant, manufactured by

Kolbe & Kolbe Millwork Co., Inc. 1323 South Eleventh Avenue Wausau, WI 54401 (715) 842 - 5666

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The wood transom windows evaluated in this report are impact resistant. This product evaluation report is for wood transom windows based on the following tested constructions:

General Description:

System	Description	Rating	Hallmark Certification
1	Heritage Transom	FW-C65 96 x 60 CW-PG65 96x60-FW Negative Design Pressure = 70 psf	413-H-1082.00 413-H-1082.01 413-H-1082.02
2	Heritage Transom	TR-C65 120 x 31 CW-PG65 120x31-TR Negative Design Pressure = 70 psf	413-H-1052.00 413-H-1052.01 413-H-1052.02
3	Heritage Transom	TR-C65 84 x 48 CW-PG65 84x48-TR Negative Design Pressure = 70 psf	413-H-1079.00 413-H-1079.01 413-H-1079.02

Product Dimensions:

System	Overall Size	Sash Size	Glass Size
1	96" x 60"	93 ¾ " x 57 ¾ "	89 ½ " x 53 ½ "
2	120" x 30 ½"	117 ³ / ₄ " x 28 ³ / ₄ "	113 ½ " x 24 ½ "
3	84" x 48"	81 ³ / ₄ " x 45 ³ / ₄ "	77 ½ " x 41 ½ "

Glazing Description:

System	Glass Construction 1	Glazing Method ²
1	SG-1	GM-1
2	SG-2	GM-1
3	IG-1	GM-1

Note: ¹ See the "Glass Construction Key" for the glass construction.

Glass Construction Key:

- IG-1: Sealed insulating glass unit. The sealed insulating glass unit is comprised of a \(\frac{5}{32}\)" fully tempered glass lite and a laminated glass unit separated by a desiccant-filled stainless steel spacer system. The laminated glass unit is comprised of two \(\frac{5}{32}\)" annealed glass lites with a 0.090" SGP interlayer. The glass thickness and type used in the insulating glass units of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.
- SG-1: Single glazed with a laminated glass unit. The laminated glass unit is comprised of two ½" annealed glass lites with a 0.090" SGP interlayer. The glass thickness and type used in the insulating glass units of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.
- SG-2: Single glazed with a laminated glass unit. The laminated glass unit is comprised of two ¼ " annealed glass lites with a 0.090" PVB + 0.007" PET interlayer. The glass thickness and type used in the insulating glass units of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:

GM-1: The laminated glass unit is interior glazed against a bed of silicone sealant backbedding. Another silicone bead is run full length at the interior edge of the glass unit around the entire perimeter and a vinyl glazing bracket is installed into a around the sash. Interior wood glazing stops are secured with brads spaced 2 inches from each corner and 8 inches on center.

Frame Construction: The frame members consist of molded pine. The frame corners are rabbeted, butted, sealed with silicone, and secured with staples and screws. Interior jamb adaptors are secured at the head and jambs with staples. **Brickmould:** The brickmould is secured to the jambs and head with T-nails spaced 10 inches on center. The brickmould is mitered and secured with screws. The sill nosing is secured to the brickmould with screws and to the frame with T-nails.

Sash Construction: The sash members consist of molded pine. The sash corners are mortise and tenon construction and are secured with screws. The sash is set against the frame with silicone. An interior stop against the sash is secured with staples.

Product Identification: A certification program label (WDMA Hallmark Certified) will be affixed to the window. The certification program label includes the manufacturer's name; product name; performance

² See the "Glazing Method Key" for the glazing method description.

characteristics; the approved inspection agency (WDMA); and the applicable standards: AAMA/WDMA/CSA 101/I.S.2/A440-05, AAMA/WDMA/CSA 101/I.S.2/A440-05, and ASTM E 1886 and ASTM E 1996.

LIMITATIONS

Design pressures (DP):

System	Overall Width (in.)	Overall Height (in.)	Design Pressure (psf)
1	96	60	+65/-70
2	120	30 ½	+65/-70
3	84	48	+65/-70

Impact Resistance: These assemblies satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the **Inland I zone** and the **Seaward zone**. The assemblies passed Missile Level D specified in ASTM E 1996-05. The assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded. These assemblies will not need to be protected with an impact protective system.

Higher Negative Design Pressure: The WDMA Hallmark Certified label indicates the product was tested to a higher negative design pressure. The higher negative design pressure is indicated in the table above.

Acceptance of Smaller Assemblies: Window assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The window assembly shall be prepared and installed in accordance with the manufacturers recommended installation instructions. Detailed installation drawings are available from the manufacturer.

Installation

Option 1 (Installation Clip): The window assembly shall be fastened to minimum Southern Yellow Pine lumber. The window assembly is secured to the wall framing using Kolbe & Kolbe metal installation clips. The installation clips (20 gauge x 10 $\frac{1}{16}$ " x 1 $\frac{5}{8}$ ") are secured to the window side jambs, head, and sill. The clips are secured to the window frame with two (2) No. 8 x $\frac{3}{4}$ " screws. The clips are secured to the wall framing with one (1) No. 8 x 1 $\frac{1}{4}$ " screw. The fasteners shall be long enough to penetrate a minimum of 1 $\frac{1}{4}$ " into the wall framing. The spacing of the clips is specified in the table below.

Installation Clip Spacing:

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System	Distance From	Distance From	Head	Sill	Side Jambs
	Each Corner	Each Corner	(on center	(on center	(on center
	Side Jambs	Head and Sill	spacing)	spacing)	spacing)
1	14"	12"	12"	12"	14"
2	15 1/4 "	17 1/8 "	17 1/8 "	17 1/8 "	None
3	16"	14"	14"	14"	16"

Option 2 (Frame Installation): The window assembly is secured to the wall framing using the frame of the window with minimum No. 10 x 2 $\frac{1}{2}$ screws. All fasteners shall be long enough to penetrate a minimum of 1 $\frac{1}{2}$ into the wall framing. The spacing of the fasteners is specified in the table below.

Fastener Spacing:

System	Distance From Each Corner Side Jamb	Distance From Each Corner Head and Sill	Head (on center spacing)	Sill (on center spacing)	Side Jambs (on center spacing)
1	12"	8"	8"	8"	12"
2	15 ½ "	13 ½"	13 ½"	13 ½"	None
3	12"	10 ½ "	10 ½ "	10 ½ "	12"

Brickmould (Systems 1-4): The brickmould shall be secured to the wall framing with minimum 2" long T-nails spaced approximately 24 inches on center along all four sides.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.